

We Claim:

1. A fabric for use in safety apparel comprising:
  - (a) yarns formed from strands of a modacrylic material; and
  - 5 (b) a cationic dye applied to said fabric; and
  - (c) wherein said dyed fabric meets both the American National Standard Institute standard for high-visibility safety apparel and the American Society for Testing and Materials standard for flame resistance.
- 10 2. The fabric of Claim 1 wherein said fabric is woven.
3. The fabric of Claim 2 wherein said modacrylic material contains at least 50 percent acrylonitrile.
- 15 4. The fabric of Claim 2 wherein said woven fabric has a tensile strength of at least about 100 pounds in the warp direction and at least about 100 pounds in the weft direction.
5. The fabric of Claim 2 wherein said woven fabric has a tear resistance of at least about 1360 grams.
- 20 6. The fabric of Claim 1 wherein said fabric is knitted.

7. The fabric of Claim 6 wherein said modacrylic material contains at least 50 percent acrylonitrile.

8. The fabric of Claim 6 wherein said knitted fabric has a bursting strength of at least about 60 pounds.

9. The fabric of Claim 1 wherein said dyed fabric meets the minimum chromacity requirements of American National Standards Institute standard ANSI/ISEA-107.

10. The fabric of Claim 1 wherein said dyed fabric meets the minimum luminance requirements of American National Standards Institute standard ANSI/ISEA-107.

11. The fabric of Claim 1 wherein said fabric meets the minimum flammability requirements of American Society for Testing and Materials standard F 1506.

15 12. A safety garment having high visibility and flame resistant characteristics formed substantially from a fabric comprising:

- (a) yarns formed from strands of a modacrylic material; and
- (b) a cationic dye applied to said fabric; and

20 (c) wherein said dyed fabric meets both the American National Standard Institute standard for high-visibility safety apparel and the American Society for Testing and Materials standard for flame resistance.

13. The safety garment of Claim 12 wherein said fabric is woven.
14. The safety garment of Claim 13 wherein said woven fabric has a tensile strength of at least about 100 pounds in the warp direction and at least about 100  
5 pounds in the weft direction.
15. The safety garment of Claim 13 wherein said woven fabric has a tear resistance of at least about 1360 grams.
- 10 16. The safety garment of Claim 12 wherein said fabric is knitted.
17. The safety garment of Claim 16 wherein said knitted fabric has a bursting strength of at least about 60 pounds.
- 15 18. The safety garment of Claim 12 wherein said dyed fabric meets the minimum chromacity requirements of American National Standards Institute standard  
ANSI/ISEA-107.
19. The safety garment of Claim 12 wherein said dyed fabric meets the minimum  
20 luminance requirements of American National Standards Institute standard  
ANSI/ISEA-107.

20. The safety garment of Claim 20 wherein said fabric meets the minimum flammability requirements of American Society for Testing and Materials standard F 1506.

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